

Emergency Preparedness and Response in Rutland City, Vermont

**Environmental Studies Senior Seminar
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Introduction

During the 2014 spring semester, our class of sixteen students embarked on what is considered to be the capstone experience for the environmental studies major at Middlebury College, the Environmental Studies Senior Seminar (ES 401). This course brings together all of the environmental studies foci to work on a variety of community-based projects that allow us to apply both the specific and interdisciplinary knowledge and skills we have gained over the past four years. Our group of four included Hannah Bristol who focuses on environmental policy, Cliff Bueno de Mesquita and Lindsay Kingston who study conservation biology, and Emily Auran who studies environmental chemistry.

Over the past twelve weeks, ES 401 has been oriented around Elizabeth Courtney and Eric Zencey's book *Greening Vermont: The Search for a Sustainable State* and the big questions it asks about Vermont's environmental future, especially as we continue to face the growing challenges of climate change. With this broader theme in mind, we narrowed our lens to focus on one particular community an hour south of Middlebury on Route 7. Rutland City used to be a thriving metropolis due to its prosperous marble and railroad industry during the 1800s. After World War II when the demand for marble plummeted, so did the rest of the community. Over the past few decades, Rutland has struggled to overcome hurdles ranging from devastating natural disasters like the 'Norricane' and Tropical Storm Irene to being branded as the center of a heroin epidemic by the New York Times. Our class' goal was to acknowledge Rutland's past while also teasing out a different set of stories about their creative economy, local foods movement, sustainable energy, and disaster preparedness.

We tackled these projects with guidance from Professor Jon Isham and community coordinator Diane Munroe. We worked with Rutland's Mayor, Christopher Louras, as our

project's community partner. We worked closely with him to hone our project in on his direct needs, as well as what seemed needed from the conversations we had with other community members. We came up with three research questions pertaining to disaster preparedness and management: What agencies/organizations are involved in disaster management and what role do they play? How are they connected? And lastly, where do the gaps exist?

Why This Matters

Our changing climate has made predicting and preparing for natural disaster events increasingly difficult. Due to this uncertainty and the impossibility of planning for every type of scenario, it is crucial that national, state, and local governments as well as individual community members are ready for anything and everything. They must be constantly asking, "are we prepared for...?" and "what happens if...?" because it only takes one crisis to both physically and emotionally devastate a community. Although the U.S Federal government has well-established emergency response mechanisms in place for a wide variety of situations, such devices are primarily employed only during times of national or multi-state crises. Therefore, towns and cities must have their own set of specific emergency response mechanisms in place.

The City of Rutland has survived, albeit with some painful bruises, numerous natural disasters including a water borne typhoid epidemic in 1910, the Great Ice Storm of 1998, a severe Nor'easter windstorm in 2007, and most recently, Tropical Storm Irene in 2011. The city has learned from each crisis and has made significant strides in being better prepared for the next inevitable crisis event. However, the repercussions of Tropical Storm Irene demonstrated the city of Rutland's vulnerability to natural disasters, despite the management plans previously set in place. The storm also taught us that in addition to responding to crises, a city must be capable of

rebounding, rebuilding, and restoring. This concept of **resilience** has become an increasingly important topic of conversation for crisis planners, responders, and managers. We looked at how collaboration, communication, and education could better foster resilience amongst the different players in Rutland emergency response.

Methods

Early on, we contacted some people who did not work in Rutland, but who provided us with some useful ideas for our project. In particular, Chris Koliba, professor of community development and applied economics at the University of Vermont, helped us define what asset mapping is (“the forging of connections between organizations and institutions that brings value to the community”) and how it relates to our project. Dan Berkman, a 2007 Middlebury graduate and emergency planner in Maryland, gave us useful suggestions about final products. He reminded us that seemingly outdated resources like brochures and pamphlets can go a long way in a community like Rutland. Lastly, Rob Collins, professor of civil engineering at the University of New Hampshire, provided us with more information about how Rutland City’s water purification system works and what its risks are.

After performing preliminary research on Rutland’s history with disasters, especially those that compromise their sole water source, we began to identify the agencies and organizations we needed to talk to. National and state agencies such as the Red Cross and the Vermont National Guard were first on our list. Then we narrowed our lens to focus on Rutland-specific institutions like the Public Works Commission, Fire Department, and Rutland Regional Medical Center. Finally, we contacted grassroots organizations such as Restoring Rutland and the Community Emergency Response Team (CERT). A list of our contacts is presented in Table 1. Furthermore, we talked to maintenance directors at four nursing homes: the Pines, Rutland

Healthcare and Rehabilitation Center, Our House, and Mountain View. Our communication with these contacts ranged from emails to phone calls to in-person interviews. These interviews were the heart of our research. Through our conversations, we learned about what role each organization plays in emergency response. We also asked these contacts about how different organization collaborated, and what they thought the weaknesses were in emergency response in Rutland. After talking thoroughly to all of these people, we had enough information to answer our three research questions. One key finding from our interviews that informed our final products was that the best way to contact people in Rutland is by mail and on Facebook.

The other part of our research was a survey we made on Survey Monkey that was sent out to residents of Rutland City through the community partners of all the groups in ES 401 (see Appendix I). This survey was completed by 44 people of varied age ranges and a balanced geographical spread. The questions asked Rutlanders who they would call or depend on during a time of crisis and tried to assess what kind of emergency management knowledge they possess. The survey was aimed at determining how we could best help the citizens of Rutland City with our project and website.

Ultimately, our final products were a website , information sheets and brochures about power and water shortage emergencies, and a final report and contact spreadsheet for the mayor. The website was made using the free website builder wix.com and was designed using ideas from the Montgomery County, Maryland website, as suggested by Dan Berkman as well as ready.gov. The website also included a map with commodity distribution points and other locations such as shelters and local response agencies. This map was made as a custom map in Google Maps and was linked to the website. The brochures and information sheets were made using information from the American Red Cross, FEMA, and the Center for Disease Control.

www.rutlanddisasterplan.wix.com/es401

Presentation

We presented our work to the Rutland Community at the Rutland Free Library on May 2014. We gave a 7 minute oral presentation of our methods, findings, and suggestions, and for an hour we had a booth with a poster set up where people came to see our products and talk to us about our work. We were pleased that Ross Nagy, Bob Schlacter, and Richard Weinhagen, three of our community partners, complemented our work. A number of other people stopped by the booth and picked up the brochures and information sheets. Our work was also presented at the Vermont Folklife Center in Middlebury, Vt., as part of an exhibit on Courtney and Zencey's *Greening Vermont* book. This work also has the potential to be continued by the Ashoka Fellow Alisa del Tufo of the Threshold Collaborative.

Group Reflection

This project was not easy and it underwent many changes over the course of the semester. It began with a focus on water related crises, as per the Mayor's request and concern, but it soon became clear that we needed to broaden our lens. We instead focused on assembling contacts, connections, and resources in case the Mayor were to be out of commission during a crisis, facilitating collaboration between the existing groups, and creating materials to educate and communicate with Rutland residents before and after a crisis. We learned how to collaborate and communicate and push through when it is challenging to do so, both with each other and with our community partners.

Due to our limited contact with our community partner and various other factors, our materials represent the compilation of all of our research as well as our conversations with the community leaders listed in our contacts table (Table 1) and we endeavored to provide accurate information to the best of our abilities. We recognize that the City may want to edit these

materials before utilizing and we have provided all of our materials in an editable format.

Since our project was interview-based, we met a lot of Rutlanders. It was inspiring for us to meet people, both leaders and regular citizens, that care so much about their community. For example, Mayor Louras and Commissioner Wennberg are two officials who are deeply concerned about their city, perhaps more so than the typical city mayor and public works commissioner. People like Kayte Munger and Jim Sabataso who founded Restoring Rutland, and Richard Weinhagen who directs the Community Emergency Response Team, were passionate volunteers who have stepped up to take on roles that they didn't have to take. We saw a side of Vermont that is easy to overlook when you are in the academic Middlebury bubble and were able to apply the skills we have learned in our focuses and in our extracurricular work to an issue we had rarely considered before. While disaster management may not be a natural extension of what we have studied, ultimately we were all able to find niches within it that played to our interests and to our strengths.

We have learned a lot about emergency management—from the nitty gritty, like what supplies are recommended in a disaster preparedness kit—to all of the different organizations and their roles in emergency response in Rutland. This made us reflect on our own emergency preparedness and what these models would look like in the communities we come from. Most importantly, we learned that emergency response at the community level is crucial and that average citizens who take initiative in during a crisis can make a difference. The social capital that is built in a small city is powerful and can allow for an adaptability and dynamism that is rare in larger populations. Resilience is all about the strength of a community, and Rutland has proved time and time again how strong it can be.

We think our products have the potential to influence Rutland's emergency management

plans and leave the City better equipped the next time disaster strikes. We hope that our products can be incorporated into Rutland's city plan, and we aimed to make them as dynamic as possible. I think the biggest challenge we face going forward is streamlining that process and making sure whoever is in charge of these products after us knows how to use them and can adapt them to fit the circumstance.

Conclusion

Rutland City has learned from its past experiences and is taking emergency preparedness and response seriously with many people dedicated to continuing to improve the community's overall resilience. For example, a new grassroots response group called Restoring Rutland formed during Tropical Storm Irene and will continue to play a key part in future emergency response for Rutland City. Furthermore, the city has taken the initiative to protect their sole water source by constructing an intake pipe to another river, so as to have a backup supply of water. The hospital and nursing homes have generators, backup water supplies, and evacuation plans, so vulnerable populations in the city are well taken care of. Some of our ideas on how the city can improve its disaster management are to increase collaboration amongst the agencies and organizations we interviewed; strengthen communication with the public throughout crises, and provide basic and important disaster planning education to the community. Our survey showed that many citizens do not feel properly prepared when it comes to emergencies. Hopefully our final products can help the city make some of these improvements.

Website information:

www.rutlanddisasterplan.wix.com/es401

username: bristolhm@gmail.com

password: rutland

Table 1. List of Interviewees

Name	Position	Type of Interview
Jeff Wennberg	Commissioner of Public Works	Phone and in person
Chris Koliba	Professor at UVM, has done a lot of asset mapping	Phone
Scott Taggart	Water Treatment Plant Manager	In person
Laura Keir	Planner, Rutland Regional Planning Commision	In person
Bob Schlachter	Chair of Rutland Region Local Emergency Planning Committee, Rutland Fire Chief	In person
Robin Collins	Professor at UNH, Expert in Slow Sand Filtration	Email
Kayte Munger	Restoring Rutland	In person
Jim Sabataso	Restoring Rutland	In person
Sarah Waterman	Founder of Vermont Response	Email
Dan Berkman	Midd alum, works on emergency preparedness in Montgomery County, MD.	Phone
Mary Nemeth	Rutland Hospital Vice President for Support	In person
Ross Nagy	Deputy Director -Preparedness and planning - Vermont Division of Emergency Management	Phone
Beth Diamond	2-1-1 Vermont	In person
Richard Weinhagen	Director of Rutland CERT	Phone
Sue Hommel	Emergency Response Public Health Specialist, VT Dept. of Health, Rutland and Middlebury	In person
Lars Lund	Forest Fire Supervisor, Rutland Dept. of Forest, Parks and Rec.	Phone

Appendix I. Survey

Rutland Disaster Management Survey

Given recent natural disasters like the Norricane and Hurricane Irene, it's more important than ever for Rutland residents to be prepared for a range of emergencies. We are a group of Middlebury College students who have been working with the city to build a website that can serve as a resource in the event of an emergency. From power outages to water shortages, planning to responding, we aim to communicate the necessary information about emergency management. Please fill out the following questions to help us tailor this website in a way that is useful for you!

1. Age Range:

- Age Range: 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- 65+

2. Which landmark do you live closest to?

- Which landmark do you live closest to? Rutland High School
- St. Joseph's College
- Rutland Regional Medical Center
- Walmart
- Rutland Country Club

3. If your water were shut off, what do you think is the minimum amount of water an average person would need for one day?

If your water were shut off, what do you think is the minimum amount of water an average person would need for one day?

4. What do you have stored in your house in the event of an emergency?

- What do you have stored in your house in the event of an emergency? Food
- Water

- Flashlight
- Radio
- Batteries
- First Aid Kit
- Back-up Prescription Drugs
- None of the Above

Other (please specify)

5. Does your family have...

- Does your family have... An Emergency Plan
- An Evacuation Plan
- None of the Above

6. Who would you call first in an emergency/disaster?



Who would you call first in an emergency/disaster?

7. Where are you most likely to go first to get more information in an emergency/disaster?

- Where are you most likely to go first to get more information in an emergency/disaster? Media
- Neighbors
- Government Agency

Other (please specify)

8. What resources would you expect to help you?

- What resources would you expect to help you? Fire Department
- Police Department
- Restoring Rutland
- Disaster Animal Response Team (DART)
- Community Emergency Response Team (CERT)
- Federal Emergency Management Agency (FEMA)

Vermont National Guard

Red Cross

None of the Above

Other (please specify)

9. Would a website consolidating disaster management information be useful to you?

- Would a website consolidating disaster management information be useful to you? Yes
- No

10. What information would you like on that website?



A large, empty text input field with a scroll bar and navigation buttons at the bottom. The scroll bar is positioned on the right side of the input field, and the navigation buttons (left, right, up, down) are located at the bottom right corner of the input field.